

SULLIVAN COUNTY UNITY COMPLEX BUILDING ASSESSMENT



PHASE ONE ARCHITECTURAL AND STRUCTURAL EVALUATION

SULLIVAN COUNTY NH – BOARD OF COMMISSIONERS

26 August 2005







SULLIVAN COUNTY UNITY COMPLEX BUILDING ASSESSMENT

"Sullivan County dedicates this building to the increased comfort and added protection of its less fortunate inhabitants"
Sullivan County Farm Building Dedication Plaque 1931

ARCHITECTURE EVALUATION

The evaluation was based on a site visit of the existing structures. The intention of the inspection was to conduct an architectural and structural inspection and assess the buildings. The evaluation of the basic structural integrity will assist in creating a determination of possible future demolition or retention of the buildings. A general order of magnitude to meet code for the buildings determined to be retained will also be given. The following report includes a basic description of the buildings as well as our recommendations for the facility.

The building numbers for this study will model the review from Bob Hemenway dated 1998 for ease of comparison. See site plan. MacConnell Special Care Unit (Building Number 1), Stearns Building (Building Number 2) and Ahern Building (Building Number 14) are not included in the scope of this report. The Chicken Coop (Building Number 10) and Shed (Building Number 11) are wood structures with vertical siding and metal roofs to the south east of Tractor Barn (Building Number 9). Both the Chicken Coop and Shed are in very poor condition and should be demolished. See photo A1.

The architectural portion of the following report was conducted on April 27th and 28th 2005, by Sean Donadio Associate AIA, and Chris Walczak of Bianco Giolitto Weston Architects LLC.

General observations of Sullivan County Unity Complex are as follows:

It was noted in several instances that water was present within the buildings and that there was damage due to water infiltration. The problem appears to be due to surface water collecting in the basements, as well as the infiltration of water into the building envelope. Measures should be taken to secure the building envelope against the weather in addition to keeping birds out of the structures.

BUILDING NUMBER 3 - SANDERS BUILDING (PARTIAL OCCUPATION)

The largest building assessed within the study is the Sanders Building (Building Number 3), which is connected to the Stearns Building (Building Number 2). The Sanders is a Federal style building built in 1931, and was most recently the former nursing home. The building consists of a ground floor level built partially below grade, a main floor (second floor) comprised of small group rooms and former residential rooms, and a third floor level of former residential rooms. The ground, second and third floors connect to the Sanders Building. The floor plan for the levels consists of a 5'-6" wide double loaded central corridor with two stair cores at each end of the building. The corridor walls appear to be bearing wall construction. The construction is brick and concrete exterior with painted concrete block and gypsum wall construction on the interior, concrete slab floor construction, exposed wood and steel roof framing and an asphalt shingle roof with metal eave edge. The building has ample windows with newer vinyl double hung replacements that allow for great amounts of natural light. See photo A2 and A3.

The partially inhabited building presently houses support spaces such as laundry facilities, maintenance offices, housekeeping, and storage on the ground floor; the second floor accommodates offices and a lounge area; the third floor is being utilized as storage; and the attic is accessible from the fire stairs and is divided by fire walls into three sections. The building is further divided to allow for the upper floor of the western section of the building to be occupied by transitional housing for the correctional unit.

See photo A4.

The building has a sprinkler system that provides coverage to all floors including the attic. The mechanical system has steam radiators supplied by the main steam plant within the building.

EXTERIOR

The two dominate points of access to the building are from the main entry of the Stearns Building, providing the handicap accessible entrance and from a service entry to the ground floor below the main entry of the Sanders Building. The main entry of the façade of Stearns is a covered entry with columns located at the center of the building with a prominent staircase leading to the second floor. At either end of the building, covered entries with columns lead to the stair cores.

The brick appears to be in good condition. Vines that are present on the façade may cause damage to the masonry over time; it is advisable to remove all vines from the building. The concrete has a stucco finish that appears to be damaged at several locations. Some staining from water at the ground is present. A gutter and leader system, which will allow for water to be deposited beyond the extents of the building,





will remedy this issue. Concrete sidewalks must be repaired to be level with concrete stairs. Additional handrails and guard rails would need to be added to the staircases for code compliance. See photo A5, A6 and A7.

GROUND FLOOR

The ground floor is used for the support services on the southern portion of the corridor. The northern section of the building is a combination of offices and storage areas. Although the floor level is below grade, the windows within the offices provide good light. The floor level is the same as the adjacent Sanders Building. The ceiling height from floor to underside of structure is 9°-3 1/2" which will allow for adaptability in the future. A tunnel connecting Maple Hill and the Carpenter's Shop provides maintenance access as well as steam lines. A full code review of fire separation would have to be addressed if the tunnel connection between buildings is to remain. See photo A8, A9 and A10.

SECOND FLOOR

The floor has some small group spaces and small residential rooms off the central corridor. The ceilings are concrete construction and are 8'-9" above finish floor. See photo A11 and A12.

THIRD FLOOR

The floor has small residential rooms and specialty support rooms, such as the hair salon. Some of the specialty rooms are still used by the nursing home. Like the second floor, the third floor has a central corridor layout. The ceilings are concrete construction. The ceilings are 8'-9" above finish floor. See photo A13.

ATTIC

The attic is divided into three spaces with rated wall partitions between and is used for storage. There are two dormers that allow for some ventilation and light. The floor structure within the three areas is partially covered with plywood sheathing. The attic ridge is 12'-6" above the floor, which allows for an open floor plate within the center of the building. The attic has a sprinkler system. See photo A14.

Overall, the condition of the building is excellent. The stair cores would have to be enlarged to meet code requirements of the door swing within the path of travel. If Sanders is to be renovated for another use, code would have to be reviewed for accessibility. The separate use would require handicap accessibility to a central entry that would provide an elevator to all floor levels. Two means of egress need to be





maintained for all areas, so attention should be given to dividing the building for separate tenants that would require portions of the floor to be locked off to the other. Limited construction and demolition could allow for larger spaces that would lend itself to broader use. Cosmetic upgrades would be required. Renovations for any assisted living and healthcare facility would be very expensive.

The structure is roughly 55' by 195'.

BUILDING NUMBER 4 - ROOT CELLAR (VACANT)

The root cellar is single story fieldstone masonry building that is bermed into the ground on three sides. The location of the structure is within the field to the rear of the Sanders Building. The structure has a corrugated metal roof with a wood entry façade. The doors are in poor condition and would need to be replaced. The interior has a metal ceiling. The floor slab is concrete with cracking present. Electricity is supplied to the building. See photo A15 and A16.

The structure is roughly 25' by 55'. The structure could be retained as storage but is limited by the location and construction. The condition of the building is good.

BUILDING NUMBER 5 - HAY BARN (PARTIAL USE)

The Hay Barn is a single story structure that is used presently as storage for equipment. Access to the building could not be obtained for a full review of the structure. The barn is wood structure with vertical wood siding on a concrete foundation. The roof construction is a scissor truss system with asphalt shingles. The building appears to have an expansive column free area that lends itself to storage. From the exterior, the rear wall appears to have to slight bowing outward; the severity of, or reason for the structural issue could not be determined from the exterior. *See photo A17*.

The structure is 40'-6" by 80'-6". The barn has a prominent location among the barns, field and parking lot. The building appears to be in good condition and should have further investigation of the structural issue within the rear wall. The building has electrical connection. The barn could easily be retained as storage if the prominent location was integrated with the future master plan.





BUILDING NUMBER 6 - HEIFER BARN (PARTIAL USE)

The Heifer Barn is a single story structure consisting of three bays with a hayloft above the central bay. The wood framed barn has heavy timber posts, concrete raised foundations and a corrugated metal roof. The bay to the south is an open perimeter bay that currently has vehicle stored within. The two inner bays are set for livestock with metal railings dividing the stalls. The barn is presently used for storage. See photo A18, A19, and A20.

The building has electrical connection. The barn structure is 36'-6" by 100'-0". The condition of the building is fair to good.

BUILDING NUMBER 7 - PIG BARN (VACANT)

The Pig Barn is a single story structure with the east end of the barn having a recessed two story manure storage space. The ground pitches away from the end of the building to allow grade access to the manure storage from below. Bird droppings are present within this area of the building, as well as, the western main entry to the building. Bird droppings should be properly removed and the building should be secured if the barn is determined to remain. The structure is a wood frame with a concrete foundation. The building envelope is a combination of wood clapboards and plywood. The structure has a corrugated metal roof. The interior of the main area has a metal panel ceiling system with failing paint. Structure of the first bay of the building at the west end is heavy post and beam construction with the remaining portion of the barn being wood stud construction. The concrete slab floors are elevated in the center, making a raised corridor between flanking stalls. See photo A21, A22, A23 and A24.

The area between the Pig and Heifer Barns has become overgrown with small trees. The trees should be removed before damage to the foundations occurs. See photo A25.

The barn is roughly 225'-0" long by 36'-9" with a 20'-6" by 34'-8" addition to the off the north elevation in the center of the structure. The building has electrical connection. A foundation of a grain silo remains on the northwest corner of the building. The building is in good condition, but is limited by the raised floor construction.





BUILDING NUMBER 8 – POLE BARN ONE (PARTIAL USE)

The Pole Barn One is a single story, four bay wood frame structure with a concrete perimeter foundation with interior posts on raised concrete piers. The exterior enclosure is vertical wood boards with battens. The roof structure is wood plank sheathing with applied corrugated metal skin. The bays of the barn are open on the south elevation. The structure has a gravel floor. See photo A26 and A27.

The open structure has weather deterioration in the wood structure in addition to the concrete foundation. The perimeter concrete foundation has settlement cracking in multiple locations.

The barn is roughly 22'-10 by 75'-6" and is in poor condition.

BUILDING NUMBER 9 - TRACTOR BARN ONE (PARTIAL USE)

The Tractor Barn has an enclosed garage area that is wood stud construction with a concrete foundation and concrete slab on grade. The exterior is a mix of T1-11 and vertical siding with battens. The building is presently under renovation to be the maintenance area. The interior has a metal deck ceiling attached to the underside of the wood trusses. The barn has small double hung windows with divided lites. Within the large bays there is a small mezzanine with a metal circular stair. At the time of the site visit, electrical upgrades were in progress for the building. Heat is provided by a stand alone furnace within the garage structure with a concrete masonry chimney. Drainage around the perimeter appears to be a problem resulting in erosion. Repairs to the structure include gutters with rain leaders and re-grading of the driveways to allow for adequate pitch away from the structure will alleviate this situation. The enclosed portion of the barn is in good condition. See photo A28, A29 and A30.

The barn also has a post and beam open structure addition to the south. The portion of the barn is in poor condition, with the foundation and concrete slab failing. The interior wood post is unstable, with a poor foundation. The portion of the barn is currently being used for storage of a historic fire truck and equipment. The structure should be braced (at minimum) immediately for safety issues. *See photo A31*, and A32.

The overall dimensions of the building are 40'-6" by 66'-0". The enclosed portion of the barn is 40'-6" by 34'-0". The garage portion is in good condition. The attached shed is in poor condition.





BUILDING NUMBER 12 – POLE BARN TWO (PARTIAL USE)

The Pole Barn Two is a one story seven bay wood post construction enclosed on three sides. The structure has vertical wood siding with a corrugated metal roof. The foundation has portions of concrete wall with most post on grade. The end bay on the southwest side has a wood mezzanine. The barn is presently being used as transitional bulk and vehicle storage. There are no utilities provided for the barn. See photo A33, A34 and A35.

The Pole Barn Two is 30'-0" by 100'-4". The structure is in poor condition.

BUILDING NUMBER 13 - CAR GARAGE (VACANT)

The Car Garage is a single story wood construction structure, concrete foundation, concrete slab on grade with an asphalt shingle roof. The exterior wall finish is vertical wood siding with batten. The foundation has damage that should be repaired on the rear wall of the garage. The structure is visually appealing and could serve other uses. *See photo A36*.

The single bay garage is 13'-0" by 20'-6". The condition of the building is good.

BUILDING NUMBER 15 – MEN'S ANNEX (VACANT)

The Men's Annex (Building Number 15) is a two story wood frame Greek Revival/Victorian with a full wall up attic and basement with walkout access. The building is the former men's dormitory. The building construction is wood stud frame with a brick and fieldstone foundation. The roof is asphalt shingles with a metal roof on the porch. The large double hung windows appear to be original single pane divided lites. The main floor has a central grand stair to the second floor. The second floor has perimeter rooms that are of good size. The access to the attic is a small communicating stair to a central corridor with rooms flanking either side. Large dormers allow for light in all rooms. At the time of the site visit, evidence of demolition was present. The building is vacant except for the use of the basement as a maintenance shop. The porch is a covered entry with square columns and Victorian bracket detailing. See photo A37.

The building did have steam radiators that were fed from an above ground steam line that has failed. A new mechanical system for the building would have to be included in the renovations of the building. The Men's Annex has electrical service that would need to be upgraded.





EXTERIOR

Access to the building is from a main porch to the first floor. The porch is in disrepair and is structurally pulling away from the building. The flooring and stairs would have to be rebuilt with handrails and guardrails to meet code. On the rear of the building there is a exterior storage building addition that is structurally failing. The roof of the addition is the structure for a fire stair to the upper levels that would have to be reconstructed as a means of egress. The storage addition would have to be demolished. The wood siding is in desperate need of paint and repair. See photo A38, A39 and A40.

BASEMENT FLOOR

The basement floor is used as a maintenance shop. The basement has large double doors to grade that provide excellent access to the space. The basement appears to have been a former garage. There is a pit and ladder within the concrete floor slab that was not investigated fully for possible environmental issues. The area has 9'-0" height from floor to underside of structure with basement windows on the perimeter. See photo A41.

FIRST FLOOR

The first floor had hardwood floors on a wood stud structure. The original tin ceilings are still existing in many rooms. The ceilings are 8'-1" above finish floor with a spacious feeling to portions of the spaces. The spaces seemed to be in good condition. See photo A42, and A43

SECOND FLOOR

On the second floor there is water and moisture damage present. The building needs to be secured from further damage from the elements. Hardwood floors are present on the second floor. The floor to ceiling height is 8'-1 1/2" above finish floor. See photo A44.

THIRD FLOOR / ATTIC

The third floor is a walk up with rooms on either side of the central corridor. The wall construction is wood stud and paneling. There is evidence of bird droppings within the space that would need to be properly removed. The tile flooring was failing due to moisture/water damage from the past. The tile would have to be tested for possible asbestos. The ceilings are 8'-1" above finish floor. See photo A45.

Over all, the condition of the building is stable (good). The building has a character that is appealing and a floor plan that would lend itself well to office space or other uses. Handicap accessibility would have to be achieved for the first floor (at minimum). If the building was to be office space a common area that was accessible may be permitted for the offices on the upper floors. A rated stair core or a more





substantial open fire escape would have to be established to allow for means of egress. The structure is roughly 35'-6" by 52'-6".

BUILDING NUMBER 16 – CARPENTER'S SHOP (PARTIAL USE)

The Carpenter's Shop is a one story building with a basement. The construction is masonry walls with concrete foundation. The roof structure is of heavy wood beams bearing on the masonry wall with a shed roof construction built above. The ground floor is of wood construction and is currently used as a maintenance workshop. The Carpenter's Shop has double hung divided lite windows that provide for nice natural light levels. A small greenhouse structure is off the south elevation. See photo A46, and A47.

BASEMENT

The building is connected through Maple Hill to the Sanders building with a tunnel. The basement has high ceilings and is used for storage. At the time of the inspection, the area had water present within the space and evidence of damage to the slab and steel column structure. At the time of the review there was water seeping from piping connections in the south wall of the basement. *See photo A48*.

FIRST FLOOR

The Carpenter's Shop has steam radiation supplied by the main steam line from Sanders. Electricity panels support current equipment use but would need to be upgraded if the building is to remain. *See photo A49*.

The shop is 25'-6" by 42'-8". The building is located in the front center of the campus, which would have to be assessed with relationship and effect to the future master plan. The workshop is in fair condition.

BUILDING NUMBER 17 – CAR GARAGE ONE (PARTIAL USE)

The Car Garage is a one story wood framed structure with a basement area under the garage space. The structures are wood frame with wood floor construction on a concrete foundation. The exterior is wood sheathing with corrugated siding and roof. *See photo A50*.

The garage is roughly 20' by 24' and is in poor condition.





BUILDING NUMBER 18 - CAR GARAGE TWO (PARTIAL USE)

The Car Garage is a one story wood framed structure with a basement area under the garage space. The structures are wood frame with wood floor construction on a concrete foundation. The exterior is wood sheathing with corrugated siding and roof. The garage is supporting the adjacent stair to the apartment; the stair is very unstable. See photo A51.

The garage is roughly 20' by 24' and is in poor condition.

BUILDING NUMBER 19 - APARTMENT BUILDING (OCCUPIED)

The Apartment Building (Building Number 19) is in the poorest condition of all the buildings evaluated. The building is built into the site with access to the first floor from the driveway grade (south elevation) and the basement walk out on the lower grade (north and east elevations.) The building is a two story heavy timber post and beam construction with a full attic and basement. The building has slate roof. The attic is accessible through a hatch in the second floor rear apartment. The building has an apartment on the first floor with two apartments on the second floor. There is a small sunroom structure built on the western end of the building that provides handicap access to the first floor apartment as well as access to the front apartment on the second floor. The handicap ramp does not meet code in slope and inadequate handrails. The front second floor apartment was not accessible for review. See photo A52, and A53.

The building has a sprinkler system present (that appears to be abandoned) that served all floors including the attic. The mechanical system is steam radiators supplied by the main steam plant.

EXTERIOR

The building has vinyl siding and replacement windows. There is basement bilco door access off of the driveway. The basement is also accessible from the side with a door to the grade. The building was connected to Maple Hill, which was demolished after the fire. *See photo A54*.

BASEMENT FLOOR

The basement floor is vacant for the most part. The foundation construction is fieldstone and brick masonry construction. There are multiple locations of water damage that are connected to serious sanitary plumbing leaks. In addition to the plumbing issues observed at the time of the review, there was water present on the south wall of the foundation. The wood post and beam construction shows deterioration. The existing walk-in freezers are collapsing and are very unstable. There is black mold





present in multiple locations of the basement. The ceiling height was 8'-4" above the concrete slab. See photo A55 and A56.

FIRST FLOOR

The first floor apartment was occupied at the time of the site visit. The ceiling height was 7'-9" above finished floor. Holes within the ceiling are present due to the plumbing repairs for the second floor. The ceilings had glued on acoustical ceiling tiles. The glue would have to be tested for possible asbestos. The wall construction was a mix of gypsum and wood paneling. Most floors were carpet with some areas having sheet vinyl. See photo A57.

SECOND FLOOR

The second floor rear apartment on the east end of the building is accessible from a covered exterior flight of stairs and porch. The supports for the stair and porch rest on the adjacent garage (Building Number 18). The stairs are very unstable. The floors within this apartment have a severe slope. The wall construction is gypsum, plaster and wood panel construction. The flooring is a combination of linoleum and carpets. The windows have a sill height of 14", which would require windows to have a protection for the bottom sash per code. The ceiling height is 8'-4" above finish floor.

ATTIC

The access for the attic is through a ceiling hatch. The roof structure is a post and beam construction. The space was not fully observed due to the absence of flooring.

Over all, the condition of the building is very poor. The building should be demolished. The slate roof should be salvaged. The main portion of the building is 31'-3" by 50'-10" with the sunroom measuring 11'-2" by 19'-8".

BUILDING NUMBER 20 – MAPLE HILL (VACANT)

Maple Hill (Building 20) is three story gambrel style building with a full basement. The building has a wrap around porch to the north of the structure with screens. There is a sunporch addition to the west elevation that has offices on the first floor and small group space on the second floor. The building is a wood stud frame construction with fieldstone and brick masonry foundation. The interior wall construction is plaster with wood lath and gypsum construction. The building was formerly the residential nursing home. The building had a fire on the south end of the building resulting in the





demolition of the connection to the Apartment Building (Building Number 19.) Evidence of the fire to the remaining structure is present. See photo A58.

The building has a sprinkler system present that provides coverage to all floors including the attic. The mechanical system is steam radiators supplied by the main steam plant. The electrical connection was upgraded to circuit breakers. Wiring is in rigid conduit in the basement.

EXTERIOR

Maple Hill Building exterior is vinyl siding and painted wood. Plywood sheathing is patched the elevation where the connection was demolished. The roof is asphalt shingles on the main roof with asphalt sheet material on the covered porch. The dormers and the eave edge of the transition of the gambrel roof are metal. See photo A59 and A60.

BASEMENT FLOOR

The basement floor is full in some portions with concrete slab and a crawl space in the rear. The area is vacant but has shelving present in some locations. The basement is accessed from interior stairs and from the tunnel to the Sanders Building (Building Number 3.) Standing water was present in the basement and the tunnel at the time of the review with mud showing flowing water from past storms. Moisture is an issue in the basement area. Black mold was present in areas of the basement. The wood posts have water damage at the base. See photo A61.

FIRST FLOOR

The building has a grand front stair that is in the center of the main portion of the building. This main stair is accessed from a parlor entry off of the wrap around porch. The floors are hard wood floors with some carpet. There is damage present in the wood floor in the south room off of the wrap around porch. There is a secondary communicating stair to the rear of the building. The doors are raised panel wood doors within the main building. The ceiling is 8'-4" above finish floor. Original painted tin ceilings, and hung ceilings are present. See photo A62.

SECOND FLOOR

The second floor has moisture damage to the plaster and ceiling. The roof is leaking on the eastern portion of the structure. See photo A63.





THIRD FLOOR

The third floor has a central corridor accessed from the rear of the building. The floor has areas of damage from water and moisture. The floor tile would have to be tested for possible asbestos. There is an exterior fire stair for second means of egress. The stair area has fire damage. See photo A64.

The damage of the fire would have to be reviewed in depth. The building should be protected from the elements to prevent further deterioration until the determination of demolition or retaining. The condition of the building is fair to good. The prominence of the building with the architectural presence to the site makes the structure strategic and should be coordinated with the future masterplan. Handicap accessibility would have to be achieved with an elevator for full use of the upper floors. A review of the code (depending on the use of the structure) may require additional rated stairwells to be added. The building is roughly 49'-4" by 87'.

ARCHITECTURE CONCLUSIONS

The architectural conclusions are based on structural and architectural condition of the buildings. The conclusions to not take into account future space requirements of the county, possible future uses, financial feasibility nor a required master plan.

•	Building Number 3 -	Sanders Building	Renovate
•	Building Number 4 -	Root Cellar	Possible Renovate
•	Building Number 5 -	Hay Barn	Possible Renovate
•	Building Number 6 -	Heifer Barn	Possible Renovate
•	Building Number 7 -	Pig Barn	Possible Demolition
•	Building Number 8 -	Pole Barn One	Possible Demolish
•	Building Number 9 -	Tractor Barn One	Renovate
•	Building Number 10 -	Chicken Coop	Demolition
•	Building Number 11 -	Shed	Demolition
•	Building Number 12 -	Pole Barn Two	Possible Demolish
•	Building Number 13 -	Car Garage	Possible Renovate
•	Building Number 15 -	Men's Annex	Possible Renovate
•	Building Number 16 -	Carpenter's Shop	Possible Demolition
•	Building Number 17 -	Car Garage One	Demolish
•	Building Number 18 -	Car Garage Two	Demolish
•	Building Number 19 -	Apartment Building	Demolish
•	Building Number 20 -	Maple Hill	Possible Renovate





STRUCTURAL EVALUATION

SCOPE OF INVESTIGATION

Survey & Discussion of Findings

On April 27th and 28th, 2005 Olivia Cellini, P.E., of CHA performed a condition survey in Unity, NH to evaluate 17 separate structures. The visual assessment of the structures is detailed below:

BUILDING #3: SANDERS BUILDING:

The Sanders Building is a three-story building comprised of wood roof joists and rafters, concrete elevated slabs appear to span between steel floor beams and columns, and concrete masonry foundation walls. On the 2nd and 3rd floors, only one steel column and steel beam was exposed for assessment. Existing drawings have not been located.

Exterior of building (the Stearns building is attached on the Northeast side of the structure and could not be inspected):

- The concrete walls below the exterior front (Northwest) concrete steps have spalled and require repair to prevent further deterioration and exposure to the steel reinforcement. Water deterioration is prevalent at this location. The steps have missing grout that requires repair. See photos 1, 2 and 3.
- The exterior brick façade requires repointing in various locations. See photo 4.
- The concrete lintels and walls surrounding the lower windows on all three sides of the building have deteriorated and have spalled. This concrete should be repaired. See photos 5 and 6.

Ground Floor: most of the ceiling and walls were covered limiting observations

2nd Floor: most of the ceiling, walls, columns and beams were covered limiting observations.

• A steel beam and column was observed to be in good condition, but the bearing of the column below was not observed; all other beams and columns could not be observed due to sheetrock cover.

3rd Floor: most of the ceiling, walls, columns and beams were covered limiting observations, and not all rooms were accessible

• A steel beam at the attic level framing into a steel column was observed to be in good condition, but the bearing of the column below (at the 2nd floor) was not observed; all other beams and columns were not observed due to sheetrock cover. *See photo 8*.

Attic: the attic was divided into three rooms. In all rooms, the roof rafters were not exposed due to insulation, but the collar ties were exposed. In room #1(adjacent to the Stearns building), wood floor joists were exposed as well as additional steel I-beams. In room #2 (adjacent to room #1), the floor joists were covered with wood flooring and were not observed. In room #3, wood joists were exposed as well as additional steel I-beams.

• Steel I-beams supporting the wood floor joints span between exterior walls in both rooms 1 and 3, and were observed to be in good condition. Wood posts bear on these steel beams, but no bearing connection existed. An additional wood spacer and bolt should be





- provided to connect each post to the existing steel angle. The angle is adjacent to all posts and is bolted to the steel beam below. *See photo 9*.
- Floor joists in rooms 1 and 3 bear on wood nailers, but beams or bearing walls were not observed below due to obstructions. See photo 10.
- The steel beams that were located at each end of the building in rooms 1 and 3 had wood nailers bolted to the web. Notched wood joists bear on these nailers. All of the joists should be nailed to the wood nailers according to NSD standards. See photo 11.

BUILDING #4: ROOT CELLAR:

The root cellar is a one-story building with stone foundation walls built into the side of a hill.

• The retaining walls located on each side of the building are structurally unstable. These walls should be removed or rebuilt. If the wall is rebuilt, proper drainage should be installed at this location. See photos 12 and 13.

BUILDING #5: HAY BARN:

The Hay Barn is a one-story structure with wood roof trusses bearing on wood bearing walls. The structure is supported on concrete foundation walls.

• The wood framing at the rear of the building appears to be bowed. Access to this portion of the building could not be obtained at the time of our field visit. This condition should be investigated further to determine if structural stabilization is required. See photo 14.

BUILDING #6: HEIFER BARN:

The Heifer Barn is a one-story, wood framed building, with a concrete slab-on-grade. The building is exposed on one side.

- An edge beam located at the exposed side of the building has deteriorated and should be replaced. Additional wood members at this location have also deteriorated due to the exposure and should either be repaired or replaced. See photo 15.
- Various knee braces located at the exposed side of the building are damaged or missing. These braces should be replaced. See photo 16.

BUILDING #7: PIG BARN:

The Pig Barn is a one-story, wood framed building supported on concrete foundations with a concrete slab-on-grade. Overall, the building appeared to be structurally sound, with only a few areas that require structural remediation.

• A wood girder spanning between two exterior walls has buckled. This beam should be replaced to support the posts above. *See photo 17*.





- The concrete slab-on-grade has spalled and cracked at various places and should be repaired. See photo 18.
- Various wood members have deteriorated due to exposure and should either be repaired or replaced.

BUILDING #8: POLE BARN I:

The Pole Barn I is a one-story, wood-framed building supported on concrete foundations. The front of the building is open, and wood siding exists at the other three sides. Due to the building being open, weathering of the various wood members were observed, as is detailed below:

- All interior wood trusses and posts bearing on concrete piers, and exterior wall wood sheathing and framing members have water damage. All deteriorated wood trusses and wall framing should be reinforced. See photo 19.
- At one exterior location, a wood post is not bearing fully on the concrete knee wall. The concrete wall should be enlarged to support the post, or the post should be repaired. See photo 20.
- Cracks were observed in several locations in the concrete foundation knee walls at each end, due to settlement. The concrete knee wall should be repaired by underpinning the foundation wall and repairing the cracks in the wall. See photo 21 and 22.

BUILDING #9: TRACTOR BARN:

The Tractor Barn is a one-story wood-framed structure supported on concrete foundations with a concrete slab-on-grade that is partially exposed at the south side of the building and is enclosed on the north side.

Exposed portion of building:

- The rear foundation knee wall has deteriorated with portions of the wall no longer present. The entire structure should be shored and the foundation wall should be replaced. See photo 23.
- The concrete slab-on-grade has cracked and has deteriorated to the point where it is no longer present in several places, and should be repaired. See photo 24.
- An interior wooden post requires immediate shoring and a new concrete pier should be installed below the frost line to support the post. See photo 24.

Closed portion of building

- A wood beam has buckled and should be replaced. See photo 25.
- Soil has eroded at the front of the building undermining the slab. Provide adequate drainage and repair the slab-on-grade as required. See photo 26.

BUILDING #12: POLE BARN II:

The Pole Barn II is a one-story, wood-framed building consisting of wood roof trusses, wood posts with knee braces, and wood siding. The foundation could not be observed during the assessment. The front of the building is open, and wood siding exists at the other three sides. Due





to the building being open, weathering of the various wood members was observed, as is detailed below:

- A partial 2nd floor exists at one end of the building, and an edge girder is deflecting approximately 6". Temporary shoring should be provided, and a new girder should be installed. See photo 27.
- The exterior sheathing is pulling away from the horizontal studs. New connections are required back to the studs. See photo 27.
- The posts located at the front of the building are deteriorated at multiple locations, and various knee braces require replacement. See photo 28.

BUILDING #13: 1-CAR GARAGE:

A small wood-framed one-story one-car garage on a concrete foundation and slab-on-grade:

• Soil beneath the foundation has eroded causing the rear foundation to crack. Proper drainage should be installed to prevent further erosion, and the concrete should be repaired. See photos 29 and 30.

BUILDING #15: MEN'S ANNEX:

The Men's Annex is a two-story wood framed structure with a full attic and basement. A one-story addition had been added to the rear of the building:

Exterior:

- The front porch has separated from the building due to deteriorated foundation and wood framing: the entire front porch should be demolished and replaced. *See photo 31*.
- The rear wall of the exterior addition is separating from the side wall: the wood knee wall has rotted from moisture damage, and the foundation has been undermined. The first floor joists of the rear addition are sequentially sloping away from the main building. The addition should be demolished. See photos 32 and 33.
- The stone foundation knee wall of the addition has been undermined, and is separating from the adjacent foundation wall: the foundation wall should be underpinned and adequate drainage installed. See photo 33.

Basement:

• A central girder, and adjacent joist, at the front of the building is rotting and should be shored and reinforced. See photo 34.

BUILDING #16: CARPENTER'S SHOP:

A one-story building with a basement comprised of wood roof joists bearing on masonry bearing walls, and wood floor joists bearing on concrete foundation walls:

- The masonry exterior walls require repointing
- The basement has extensive water damage and water is leaking through the walls and slab. The steel posts are rusting at the base, and should be replaced. See photo 35.





- The slab-on-grade in the basement has spalled and cracked in various places due to the water damage, and should be repaired. See photo 35.
- The 1st floor joists appear to be fairly new. Moisture infiltration is present on the 1st floor joists and flooring. Steps should be taken to eliminate the moisture infiltration to prevent damaging the floor joists. See photo 36.
- Water can be seen leaking from pipes through the foundation wall onto the slab below. The concrete wall is damaged and should be repaired. Steps should be taken to repair the mechanical piping to prevent further water from damaging the basement. See photo 37.
- A wood roof joist, adjacent to the greenhouse, has deteriorated due to water damage. The joist should be repaired at the bearing connection. See photo 38.

BUILDING #17: 2-CAR GARAGE:

A one-story wood-framed structure with a partial basement is comprised of wood roof rafters, wood bearing walls, wood floor joists and concrete foundations.

- The exterior sheet metal façade is deteriorating and should be replaced. See photo 39.
- Extensive moisture damage is located throughout the garage: majority of joists, and wall studs have deteriorated, and should be replaced or repaired. See photo 40.

BUILDING #18: 2-CAR GARAGE:

A one-story wood-framed structure:

• The adjacent porch is bearing on the roof of the garage, but no additional supports in the garage were provided. The porch is separating from the adjacent building. The roof joists should be analyzed to determine if additional reinforcement is required to support the adjacent building's porch. See photos 41 and 42.

BUILDING #19: APARTMENT BUILDING:

The apartment building is a two-story wood-framed building with a full attic and basement. Three apartments are in the building: the one apartment at the top floor, and apartment on the first floor were observed; the last apartment on the second floor was not accessible. The attic and basement was also observed.

Exterior: The entire apartment building is covered with vinyl siding.

- Exterior concrete steps and a driveway's concrete foundation have cracked and should be repaired. See photos 43 and 51.
- A stone retaining wall adjacent to the first floor porch is separating from the porch's stone foundation wall. The wall should be repaired or removed, and adequate drainage installed. See photo 44.

Basement: wood joists and girders at the 1st floor span between stone and masonry foundation walls, and wood and steel posts.

• Water damage was observed throughout the entire basement. The majority of the 1st floor joists has signs of deterioration, wood interior posts had signs of deterioration, interior





steel posts had rusted, and portions of the slab-on-grade had damage. The water damage appeared to have occurred over a long period of time. Extensive growths of mold and noticeable deterioration of the wood members were present at the time of our assessment. Temporary shoring should be installed immediately for the floor above, and probes should be taken of the wood joists to determine their structural integrity, and the joists should be reinforced. Portions of the concrete slab that had been damaged should also be removed and replaced. The walls also had signs of extensive water exposure and should be inspected for further damage. See photos 45 and 46.

- During the investigation, a sanitary pipe was observed to immediately leak onto the slab below. The slab at this location had been damaged to the point that no slab existed at this location. This slab is adjacent to masonry bearing walls, and the erosion of the soil beneath the slab is undermining the wall and will likely cause further damage if no remediation is performed. The water leakage should be immediately remedied, and the slab repaired to prevent further damage from occurring. See photo 47.
- A masonry arch near the entrance to the basement has been damaged and should be repaired immediately. See photo 48.

1st Floor: The apartment occupied the entire 1st floor.

• The apartment was occupied, and there were no structural members exposed for observation

2nd Floor: The apartment located at the rear of the apartment building was observed, but the front apartment was not accessible

- The entire 2nd floor apartment floor is sloped away from the entrance. The walls, floors and ceiling were not exposed, so it was unclear what was causing the sloped floor. Additional investigations should be conducted to determine the structural soundness of the building. See photo 49.
- The top porch is separating from the building: the exterior side of the porch is supported by posts that bear on the separate adjacent garage roof below. This porch, and stairs, are structurally unstable, and should be immediately shored and repaired (see notes for Building #18: 2-Car Garage). See photo 50.
- The stairs leading up to the 2nd floor porch are leaning away from the building, and the concrete slab supporting the bottom of the stairs has cracked on one side and should be repaired. See photo 51.
- The two wood posts supporting the lower portion of the stairs do not have an adequate foundation, and the posts have settled. Concrete piers should be poured for the stair post supports. Cross-bracing and additional reinforcement for the posts should also be installed. See photo 52.

Attic: wood rafters are supported by wood beams and posts and by the wood exterior bearing walls below. The attic was observed from the attic hatch, and access was limited due to the absence of any attic flooring.

- All rafters, posts and girders that were observed appeared to be in good condition. The bearing of the rafters on the exterior walls below were not observed due to insulation, and should be investigated further. See photo 53.
- The roof joists were only partially observed, and appeared to be in fair condition





BUILDING #20: MAPLE HILL:

Maple Hill building is a three-story wood-framed structure, with an attic and basement. The building is currently not occupied, and a portion of the building experienced a fire less than a year ago.

Exterior:

- The side of the building that experienced the fire has a plywood façade that is starting to deteriorate at the base due to water damage. See photo 54.
- Erosion of the soil at the rear porch is undermining the foundation in several places. The foundation should be underpinned and adequate drainage installed. See photo 55.

Basement: the basement connected to a tunnel that extended from the Sanders building, past Maple Hill and to the carpenter's shop.

- There are signs of moisture in the basement: a wet dirt floor, but no standing water. The water does appear to have infiltrated the basement for an extended period of time due to deterioration of wood shelving standing on the floor. See photo 56.
- The slab-on-grade that exists in some areas of the basement is cracked and has signs of moisture damage. The slab should be repaired, and a new slab should be poured where no slab exists, and proper drainage installed. See photo 57.
- The tunnel has extensive moisture damage from the pipes running through the tunnel: standing water exists in several area in the tunnel. The concrete and walls should be repaired as required. See photo 58.
- An unreinforced concrete masonry unit (CMU) wall in the tunnel, adjacent to the foundation beneath the front of Maple Hill, requires reinforcement: the loads from a brick pier adjacent to this wall, and wet backfill soil have caused a slight bowing of the CMU wall. Steps should also be taken to eliminate the water leakage. See photo 59.

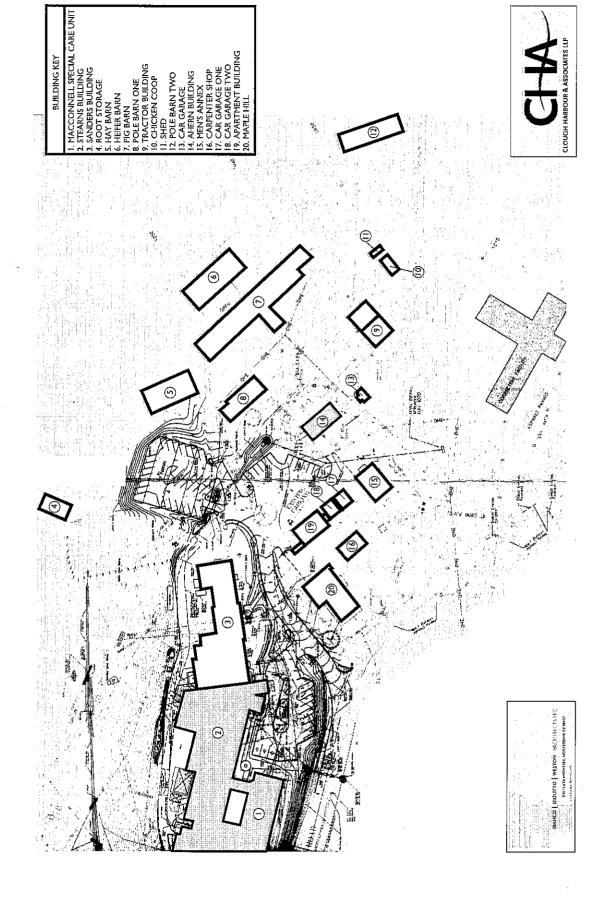
 1^{st} Floor: the fire had been contained to the 2^{nd} and 3^{rd} floors and fire damage could be seen of the 2^{nd} floor joists.

- At the rear of the house, floor boards are raised in the middle of a room, but the reason was unknown. Steps should be taken to identify the causes, and repair the damages. See photo 60.
- 2nd and 3rd Floor: extensive fire damage is prevalent at the front of the house
 - Temporary shoring was installed at the front stair: all framing should be repaired or replaced at the damaged areas. The front bearing wall has extensive damage: all wall studs and the 2nd and 3rd floor joists at this location should be reinforced or replaced. See photo 61.
 - Temporary shoring should be installed in additional locations for the 2nd and 3rd floors at the fire-damaged areas until all work is completed. *See photo 62*

Attic: The attic was observed from the attic hatch, and access was limited due to the absence of any attic flooring. Further investigations should be conducted to ensure that attic is free of any moisture or insect damage, and all structural members are sound.







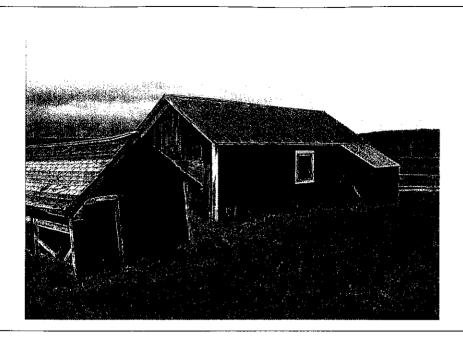
ARCHITECTURAL PHOTOGRAPHS



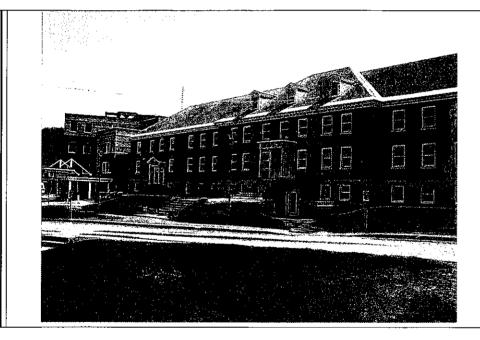
APPENDIX







Photograph A1 – 04/28/05 Chicken coop and shed.



<u>Photograph A2</u> - 04/28/05 - Sanders Building (Building #3): North elevation of Sanders showing main entry and access to ground level.



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<u>Photograph A3</u> – 04/28/05 – Sanders Building (Building #3): Main entry, note damage to exterior steps. Tunnel access is below the main stairs connecting to Maple Hill and beyond to the Carpenters Shop.



<u>Photograph A4</u> - 04/28/05 – Sanders Building (Building #3): West elevations showing the service entrances on the rear of the building.

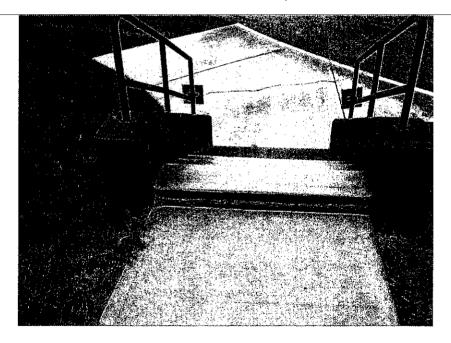


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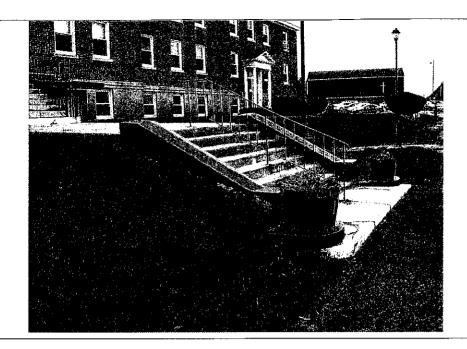


<u>Photograph A5</u> – 04/28/05 – Sanders Building (Building #3): Vines on the concrete and masonry. All vines should be removed from the façade.

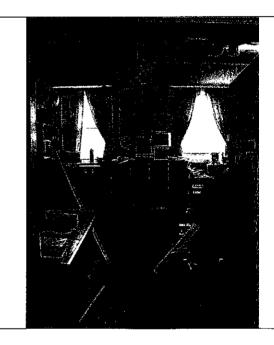


Photograph A6 - 04/28/05 - Sanders Building (Building #3): Concrete sidewalk is failing.



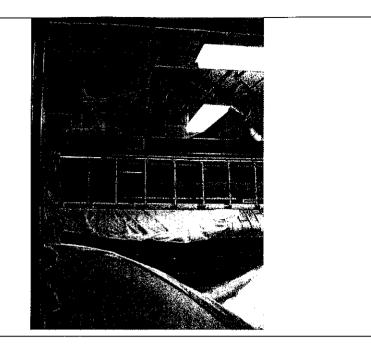


<u>Photograph A7</u> – 04/28/05 – Sanders Building (Building #3): New handrails and guardrails for the buildings and site will need to be installed to meet code requirements.



<u>Photograph A8</u> - 04/28/05 – Sanders Building (Building #3): Ground floor office showing natural light from windows.



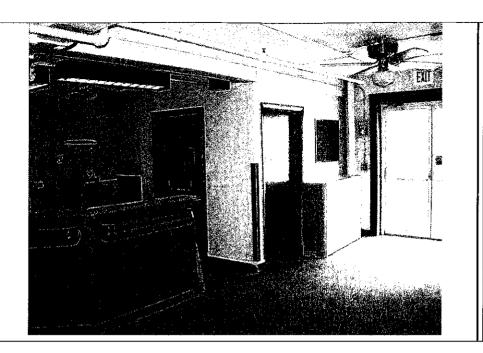


<u>Photograph A9</u> – 04/28/05 – Sanders Building (Building #3): Laundry facilities supporting nursing facility.

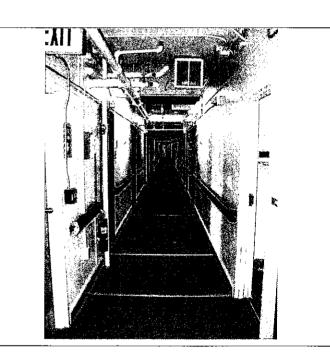


Photograph 10 - 04/28/05 - Sanders Building (Building #3): Tunnel connecting to Maple Hill.



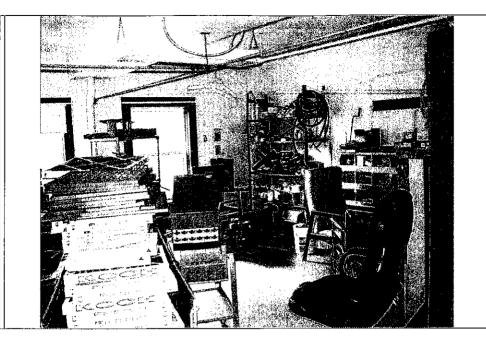


Photograph A11 - 04/28/05 - Sanders Building (Building #3): Small group area at the main entry.

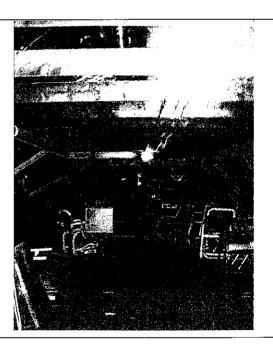


 $\underline{Photograph\ 12} - 04/28/05 - Sanders\ Building\ (Building\ #3):$ Second floor corridor.



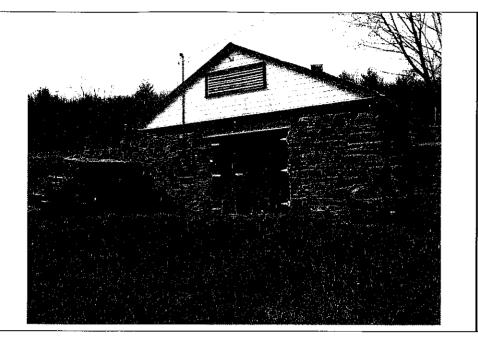


Photograph 13 - 04/28/05 - Sanders Building (Building #3): Third floor room used as storage.

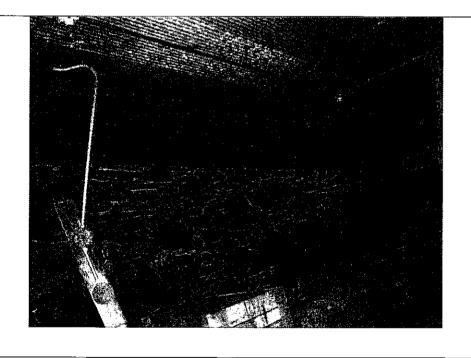


Photograph 14 - 04/27/05 - Sanders Building (Building #3): Attic east section used as storage.



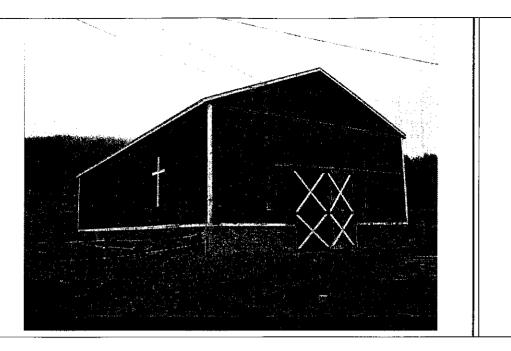


Photograph 15 - 04/27/05 - Root Cellar (Building #4): Wood end wall needs repairs.



Photograph 16 - 04/27/05 - Root Cellar (Building #4): Interior - metal ceiling..



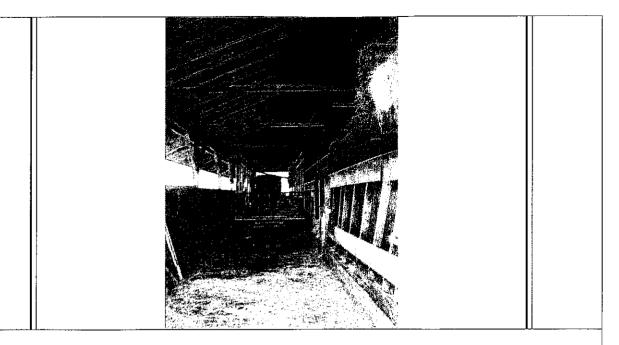


Photograph A17 – 04/27/05 – Hay Barn (Building #5): Exterior (west elevation)

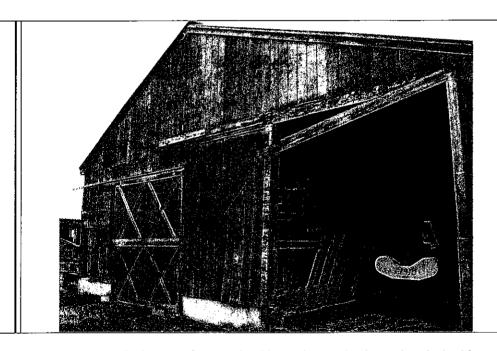


Photograph A18 -. Heifer Barn (Building #6): Exterior (east elevation) with pasture beyond.





Photograph 19 – 04/27/05 – Heifer Barn (Building #6): Open bay structure.



Photograph 20 - 04/27/05 - Heifer Barn (Building #6): Exterior (west elevation) with open bay.



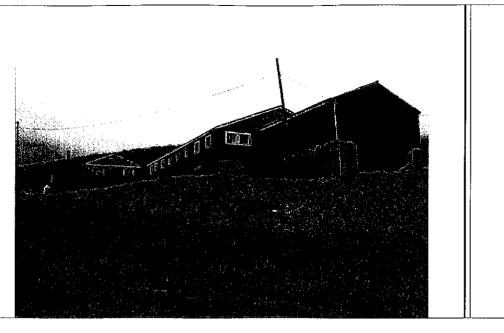


Photograph 21 – 04/27/05 – Pig Barn (Building #7): Exterior of building note silo foundation



Photograph 22 - 04/27/05 - Pig Barn (Building #7): Exterior (east elevation)





Photograph 23 – 04/27/05 – Pig Barn (Building #7): Exterior showing manure storage area.



<u>Photograph 24</u> - 04/27/05 – Pig Barn (Building #7): Interior showing failing paint on metal ceilings and stall configuration.



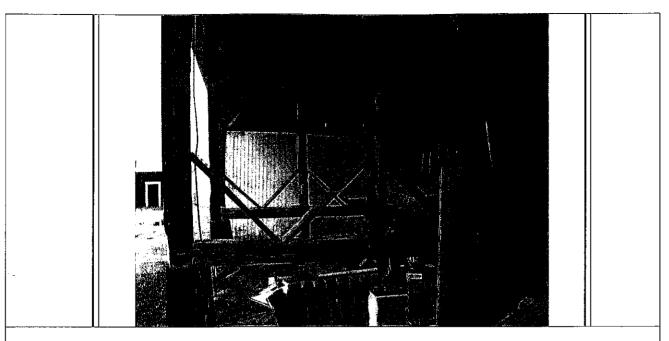


Photograph 25 - 04/27/05 - Pig Barn (Building #7): Trees should be removed in the area between barns

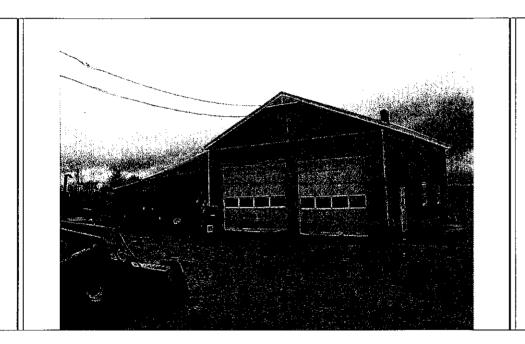


<u>Photograph 26</u> - 04/27/05 – Pole Barn I (Building #8): wood post construction of open bays (south elevation)





Photograph 27 – 04/27/05 – Pole Barn I (Building #8): wood post construction

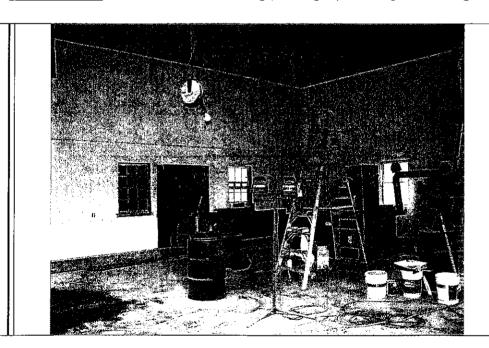


<u>Photograph 28</u> - 04/27/05 - Tractor Building (Building #9): West elevation showing closed bays and open bay structure.



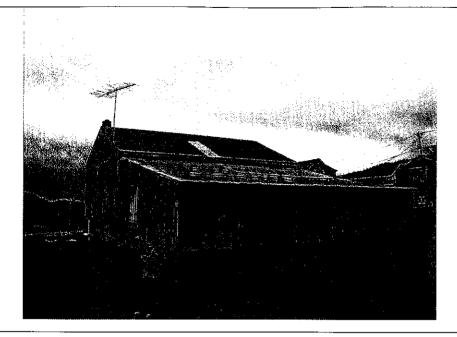


<u>Photograph A29</u> – 04/27/05 – Tractor Building (Building #9): Interior photo showing mezzanine.



<u>Photograph A30</u> – 04/27/05 – Tractor Building (Building #9): Interior photo showing furnace and metal ceiling.



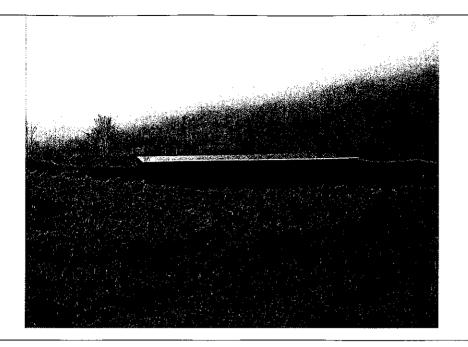


<u>Photograph A31</u> – 04/27/05 – Tractor Building (Building #9): Open bay structure from exterior.



<u>Photograph A32</u> – 04/27/05 – Tractor Building (Building #9): Interior photo of timber structure of open bays of Tractor Building.





Photograph A33 - 04/27/05 - Pole Barn II (Building #12): West elevation of Pole Barn.



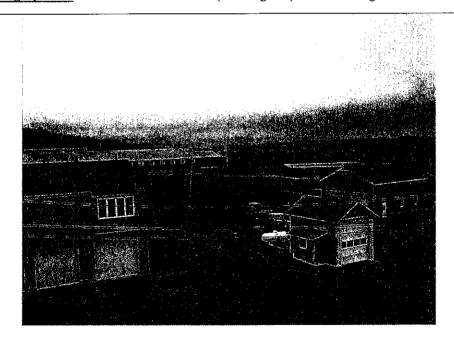
Photograph A34 - 04/27/05 - Pole Barn II (Building #12): Open side of Pole Barn II.



PHOTOGRAPHS

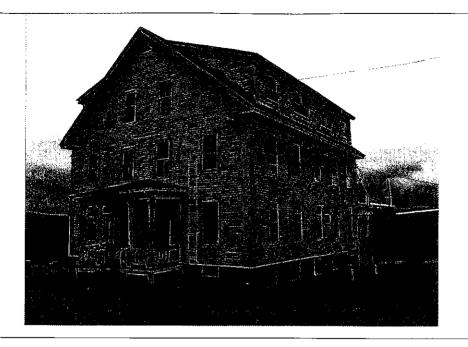


Photograph A35 – 04/27/05 – Pole Barn II (Building #12): Deteriorating structure of Pole Barn II

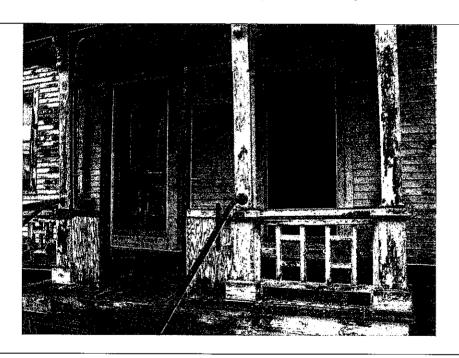


Photograph A36 – 04/27/05 – One-Car garage (Building #13): Exterior of small structure.



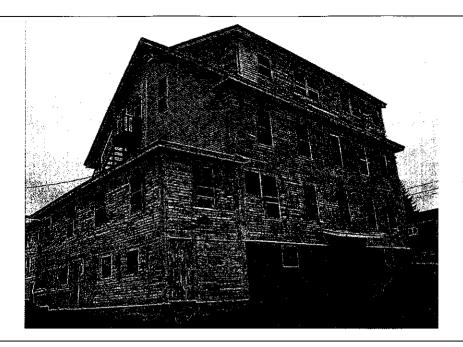


Photograph 37 – 04/27/05 – Men's Annex (Building #15): Front entry elevation.



Photograph 38 – 04/27/05 – Men's Annex (Building #15): Front entry porch failing.





Photograph 39 – 04/27/05 – Men's Annex (Building #15): Side elevation showing basement access.

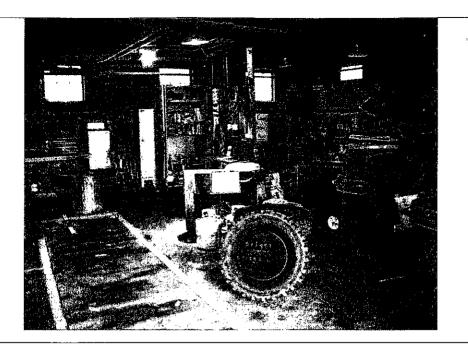


Photograph 40 - 04/27/05 - Men's Annex (Building #15): rear elevation showing failing structure of addition and broken overhead steam line.

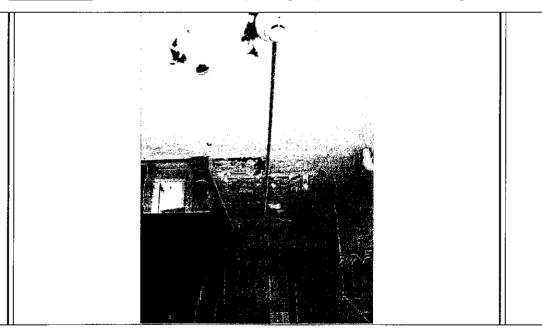


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Photograph 41 - 04/27/05 - Men's Annex (Building #15): Basement of annex with perimeter windows.



Photograph 42 - 04/27/05 - Men's Annex (Building #15): Tin Ceilings.



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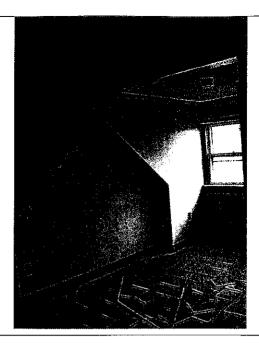


Photograph 43 - 04/27/05 - Men's Annex (Building #15): Central Stair

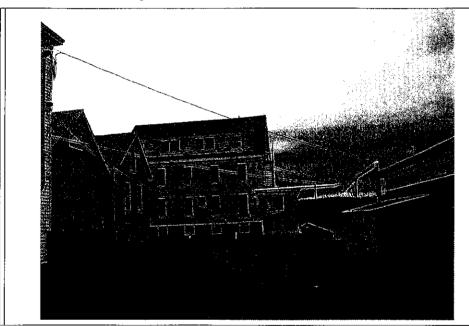


Photograph 44 - 04/27/05 - Men's Annex (Building #15): second floor room.





<u>Photograph 45</u> – 04/27/05 – Men's Annex (Building #15): Third floor dormer. Note tile flooring failing.



Photograph 46 - 04/27/05 - Carpenter's Shop (Building #16): Carpenters Shop on right of the photo showing green house. The Garages 17 & 18 are on the left with Men's Annex 15 in the background.

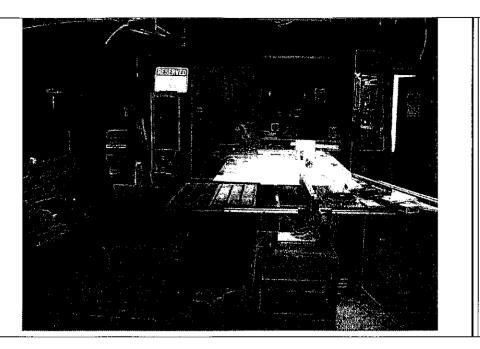


Photograph 47 – 04/27/05 – Carpenter's Shop (Building #16): Exterior photo of building



Photograph 48 - 04/27/05 - Carpenter's Shop (Building #16): Basement photo of workshop



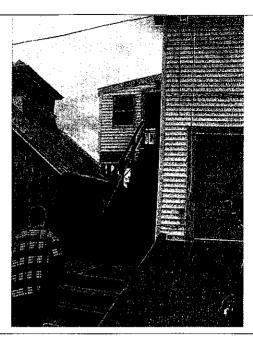


Photograph 49 – 04/27/05 – Carpenter's Shop (Building #16): First floor workshop



Photograph 50 - 04/27/05 - Two Car Garage (Building #17 and #18) with Apartment Building.



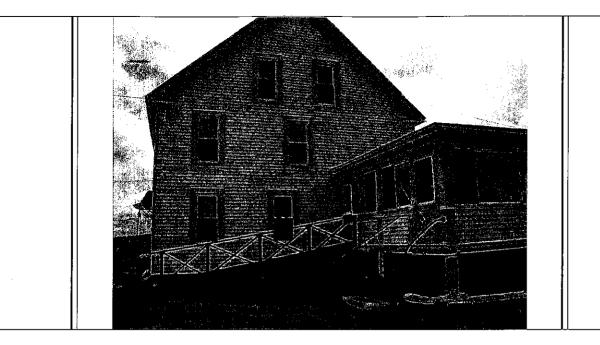


Photograph 51 - 04/27/05 - Two Car Garage (Building #18): Adjacent porch bearing on garage roof

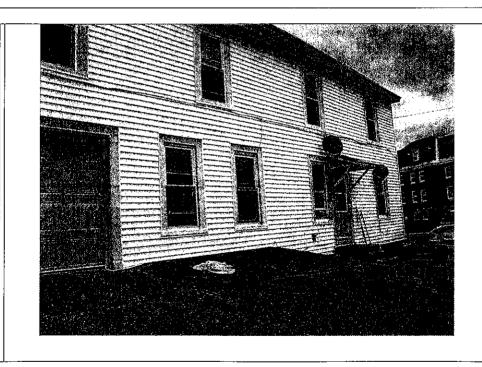


<u>Photograph 52</u> - 04/27/05 – Apartment Building (Building #19): West elevation with sun porch and basement entry.





Photograph 53 – 04/27/05 – Apartment Building (Building #19): ramp is not code compliant.



Photograph 54 – 04/27/05 – Apartment Building (Building #19): south elevation





Photograph 55 - 04/27/05 - Apartment Building (Building #19): Basement slab damage.



<u>Photograph 56</u> – 04/27/05 – Apartment Building (Building #19): Basement slab damage.



ARCHITECTURAL ASSESSMENT REPORT PHOTOGRAPHS

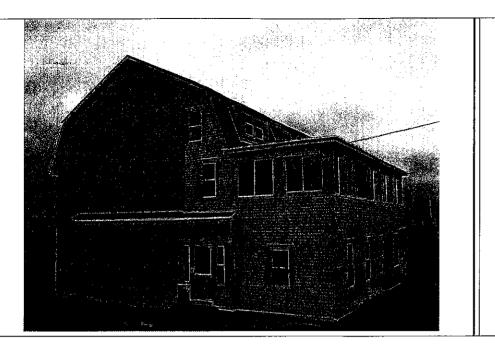


<u>Photograph 57</u> - 04/27/05 – Apartment Building (Building #19): Water damage in ceiling from plumbing problems.

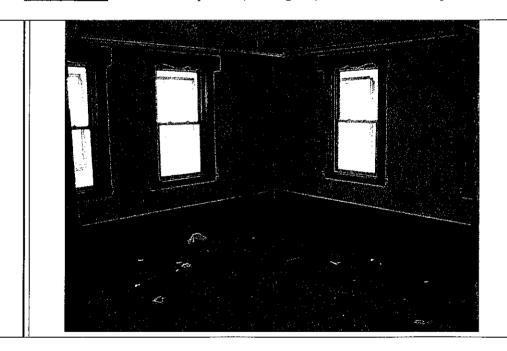


Photograph 58 – 04/27/05 – Maple Hill (Building #20): North Elevation with covered porch.





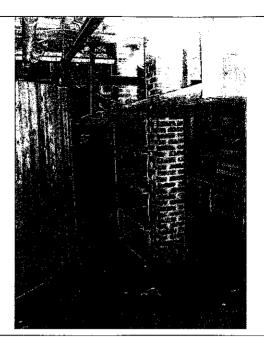
Photograph 59 - 04/27/05 - Maple Hill (Building #20): South elevation with patched area from the fire.



Photograph 60 - 04/27/05 – Maple Hill (Building #20): View of covered porch.



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Photograph 61 – 04/27/05 – Maple Hill (Building #20): Basement with standing water.



<u>Photograph 62</u> - 04/27/05 – Maple Hill (Building #20): First floor damage from water.





Photograph 63 – 04/27/05 – Maple Hill (Building #20): Central stair on second floor...



Photograph 64 - 04/27/05 - Maple Hill (Building #20): Third floor with damage from fire.



STRUCTURAL PHOTOGRAPHS



APPENDIX







Photograph 1 - 04/28/05 - Sanders Building (Building #3): Front concrete exterior stair



Photograph 2 - 04/28/05 - Sanders Building (Building #3): Front concrete exterior stair





Photograph 3 – 04/28/05 – Sanders Building (Building #3): Exterior steps



<u>Photograph 4</u> - 04/28/05 – Sanders Building (Building #3): Exterior Brick façade: repointing required below window at this location





<u>Photograph 5</u> – 04/28/05 – Sanders Building (Building #3): Front concrete lower walls surrounding windows- spalling concrete has exposed steel reinforcement



<u>Photograph 6</u> - 04/28/05 - Sanders Building (Building #3): Concrete lower walls surrounding window- spalling concrete has exposed steel reinforcement

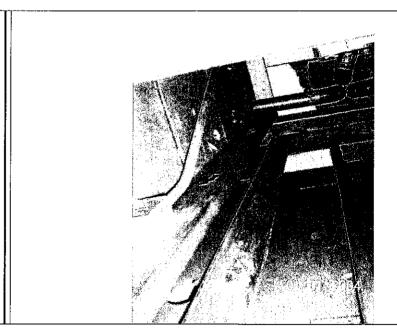


Sullivan County Unity Complex Facilities

STRUCTURAL ASSESSMENT REPORT PHOTOGRAPHS

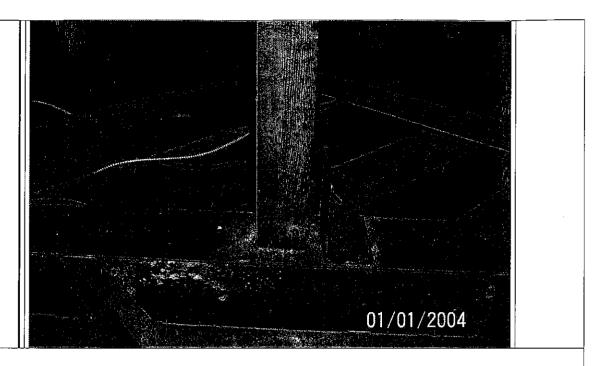


Photograph 7 – 04/28/05 – Sanders Building (Building #3): 1st floor beam is cracking at bearing



<u>Photograph 8</u> - 04/28/05 – Sanders Building (Building #3): Steel beam at 3rd floor framing into steel





<u>Photograph 9</u> – 04/28/05 – Sanders Building (Building #3): wood post bearing on steel beam at attic floor framing



<u>Photograph 10</u> - 04/28/05 – Sanders Building (Building #3): wood post bearing on steel beam at attic floor framing



Sullivan County Unity Complex Facilities STRUCTURAL ASSESSMENT REPORT

UCTURAL ASSESSMENT REPORT PHOTOGRAPHS

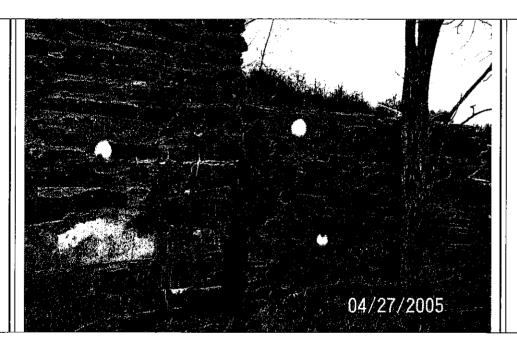


<u>Photograph 11</u> – 04/28/05 – Sanders Building (Building #3): wood joists bearing on wood nailers; which are bolted into a steel beam within the attic floor framing





Photograph 12 – 04/28/05 – Root Cellar (Building #4): Retaining wall #1 is unstable

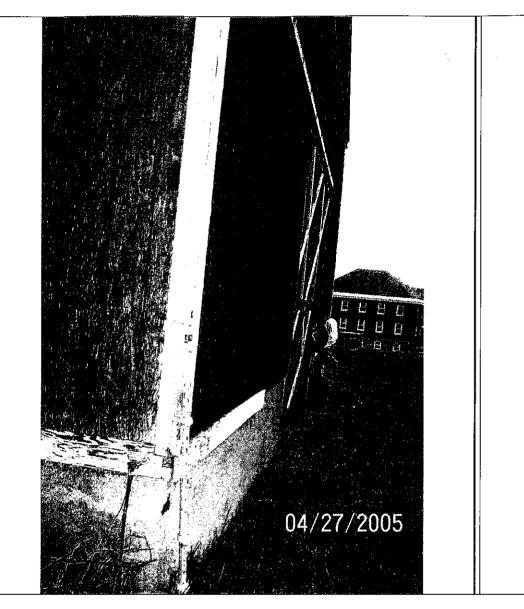


Photograph 13 - 04/28/05 - Root Cellar (Building #4): Retaining wall #2 is unstable



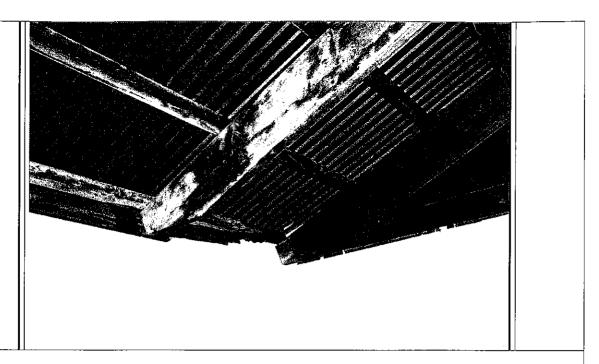
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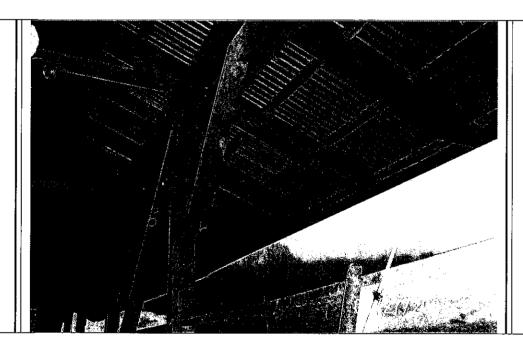


Photograph 14 – 04/27/05 – Hay Barn (Building #5): Rear wall is slightly bowing outward





Photograph 15 – 04/27/05 – Heifer Barn (Building #6): Decayed wooden edge beam

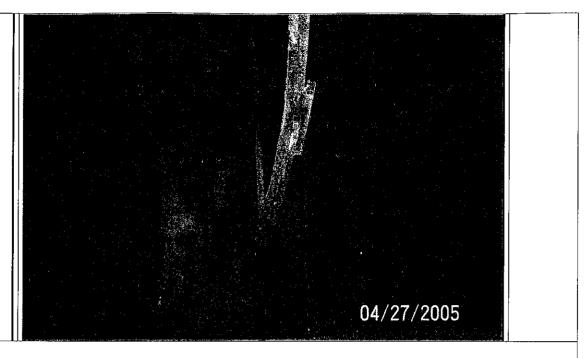


Photograph 16 - 04/27/05 - Heifer Barn (Building #6): Broken and missing knee braces



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Photograph 17 – 04/27/05 – Pig Barn (Building #7): wood girder out-of-plumb



Photograph 18 - Pig Barn (Building #7): spalling of concrete slab



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<u>Photograph 19</u> – 04/27/05 – Pole Barn I (Building #8): Wood post is cracking; wood girder has decayed

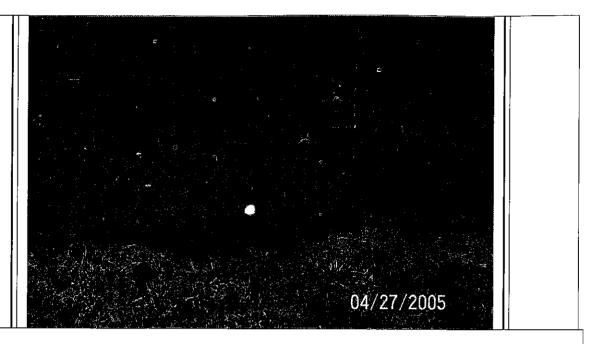


<u>Photograph 20</u> - 04/27/05 – Pole Barn I (Building #8): wood post partially bearing on concrete knee wall below

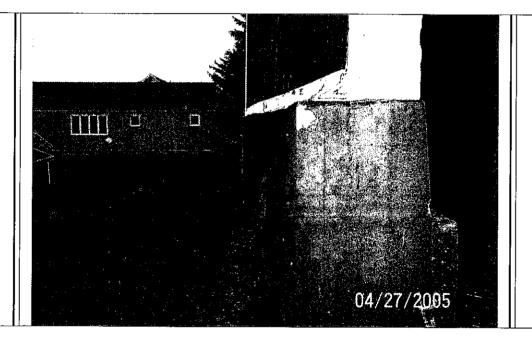


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<u>Photograph 21</u> – 04/27/05 – Pole Barn I (Building #8): cracks in concrete foundation knee wall due to settlement



<u>Photograph 22</u> - 04/27/05 - Pole Barn I (Building #8): cracks and spalling in concrete foundation knee wall due to settlement





<u>Photograph 23</u> – 04/27/05 – Tractor Building (Building #9): Deteriorated concrete foundation wall



<u>Photograph 24</u> - 04/27/05 - Tractor Building (Building #9): Post bearing at open portion of building; cracked slab-on-grade



STRUCTURAL ASSESSMENT REPORT PHOTOGRAPHS

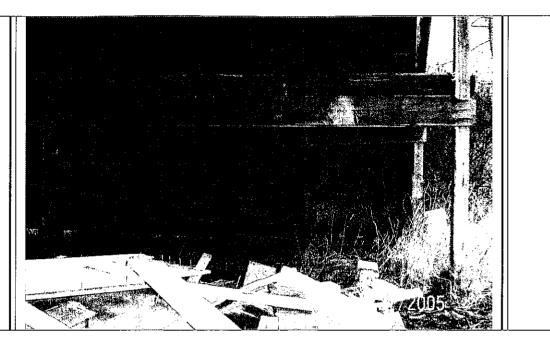


<u>Photograph 25</u> – 04/27/05 – Tractor Building (Building #9): Buckled wood beam at closed portion of building

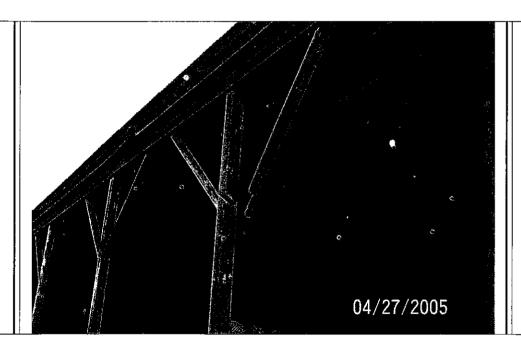


<u>Photograph 26</u> - 04/27/05 - Tractor Building (Building #9): Water damage at exterior soil, interior slab-on-grade





<u>Photograph 27</u> – 04/27/05 – Pole Barn II (Building #12): wood girder adjacent to exterior wall has large deflection and adjacent wall is pulling away from horizontal studs.



Photograph 28 - 04/27/05 - Pole Barn II (Building #12): wood knee braces are broken





Photograph 29 - 04/27/05 - One-Car garage (Building #13): Soil erosion undermining foundation



Photograph 30 – 04/27/05 – One-Car garage (Building #13): Soil erosion undermining foundation



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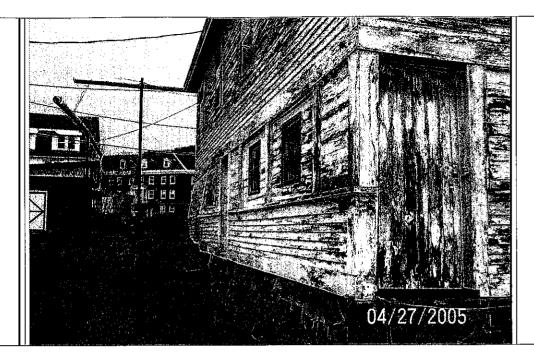


Photograph 31 – 04/27/05 – Men's Annex (Building #15): Front porch



Photograph 32 – 04/27/05 – Men's Annex (Building #15): Rear addition's exterior wall





Photograph 33 – 04/27/05 –Men's Annex (Building #15): Rear addition

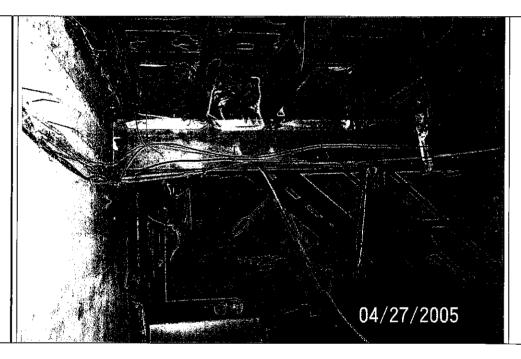


Photograph 34 - 04/27/05 - Men's Annex (Building #15): Wood girder at first floor





<u>Photograph 35</u> – 04/27/05 – Carpenter's Shop (Building #16): Steel post in basement has extensive water damage; slab also has extensive water damage



<u>Photograph 36</u> - 04/27/05 —Carpenter's Shop (Building #16): 1^{st} floor joists are fairly new-moisture can be seen infiltrating through 1^{st} floor



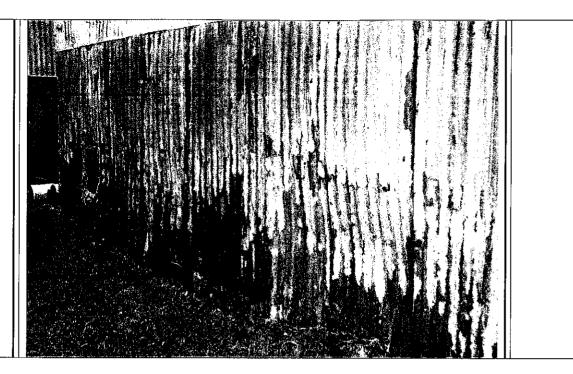


Photograph 37 - 04/27/05 - Carpenter's Shop (Building #16): Water damage at foundation wall



 $\underline{Photograph\ 38} - 04/27/05$ -Carpenter's Shop (Building #16): Water damage at roof wood joist



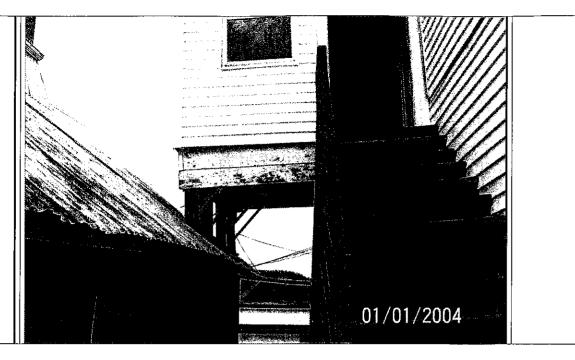


Photograph 39 - 04/27/05 -Two Car Garage (Building #17): Deterioration of sheet metal façade

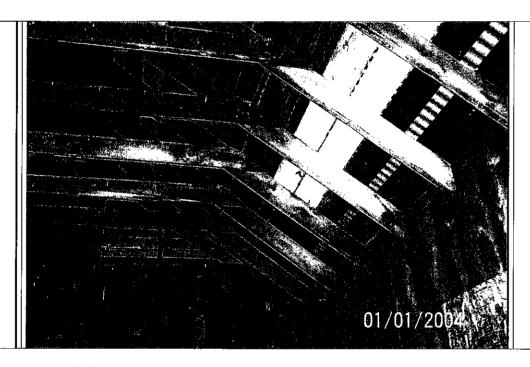


Photograph 40 – 04/27/05 –Two Car Garage (Building #17): Interior water damage





Photograph 41 - 04/27/05 - Two Car Garage (Building #18): Adjacent porch bearing on garage roof



<u>Photograph 42</u> - 04/27/05 –Two Car Garage (Building #18): Interior roof rafters below adjacent porch bearing -





<u>Photograph 43</u> – 04/27/05 – Apartment Building (Building #19): exterior concrete driveway; exterior vinyl siding



Photograph 44 - 04/27/05 - Apartment Building (Building #19): Exterior stone retaining wall





<u>Photograph 45</u> – 04/27/05 – Apartment Building (Building #19): Water damage at first floor joists and at steel post in basement



<u>Photograph 46</u> - 04/27/05 – Apartment Building (Building #19): Water damage at wood post and slab-on-grade





<u>Photograph 47</u> – 04/27/05 – Apartment Building (Building #19): Eroded soil adjacent to basement foundation wall

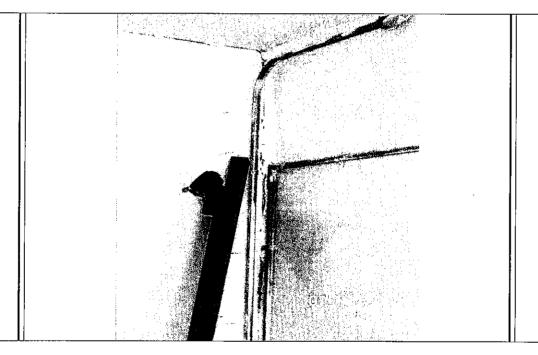


Photograph 48 - 04/27/05 - Apartment Building (Building #19): Damaged masonry arch



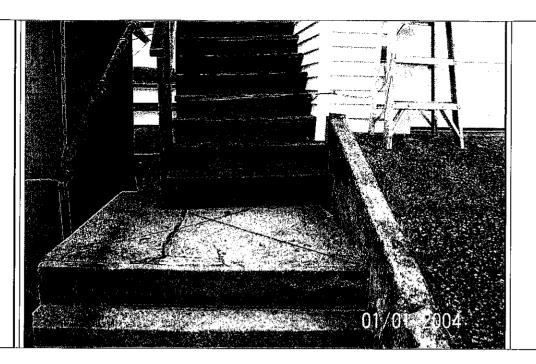


<u>Photograph 49</u> – 04/27/05 – Apartment Building (Building #19): Large slope in 2nd Floorlow point at right



<u>Photograph 50</u> - 04/27/05 – Apartment Building (Building #19): Cracks at exterior 2^{nd} floor porch's connection to main building



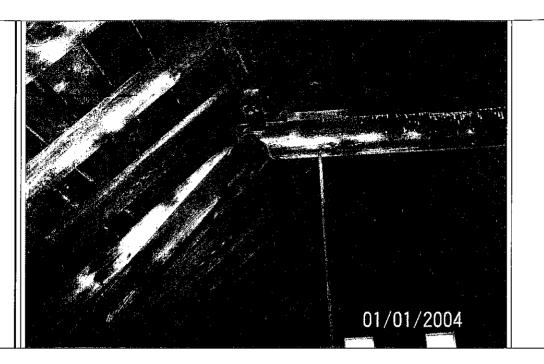


<u>Photograph 51</u> – 04/27/05 – Apartment Building (Building #19): Cracks in slab at exterior porch stair support; exterior porch stairs are leaning away from building



Photograph 52 - 04/27/05 - Apartment Building (Building #19): Exterior porch stair post supports





Photograph 53 – 04/27/05 – Apartment Building (Building #19): wood rafters bearing on wood girders





Photograph 54 – 04/27/05 – Maple Hill (Building #20): Deterioration of exterior plywood



Photograph 55 - 04/27/05 - Maple Hill (Building #20): Rear porch: erosion of soil at foundation



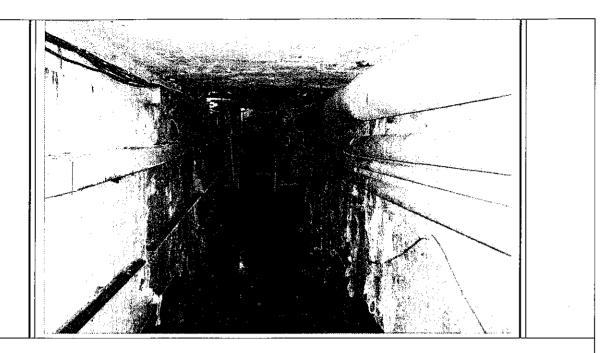


Photograph 56 - 04/27/05 - Maple Hill (Building #20): Moisture in basement- wood shelf deteriorating



<u>Photograph 57</u> - 04/27/05 – Maple Hill (Building #20): Moisture in basement; patches of slab-on-grade





<u>Photograph 58</u> – 04/27/05 – Maple Hill (Building #20):

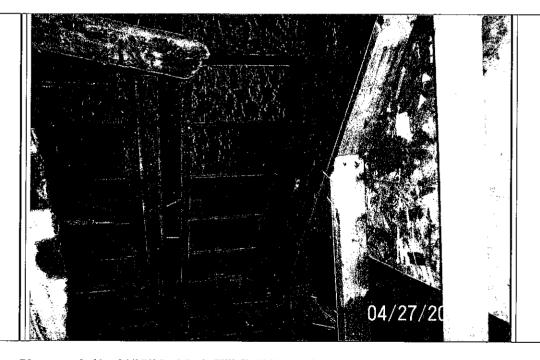


Photograph 59 - 04/27/05 - Maple Hill (Building #20):



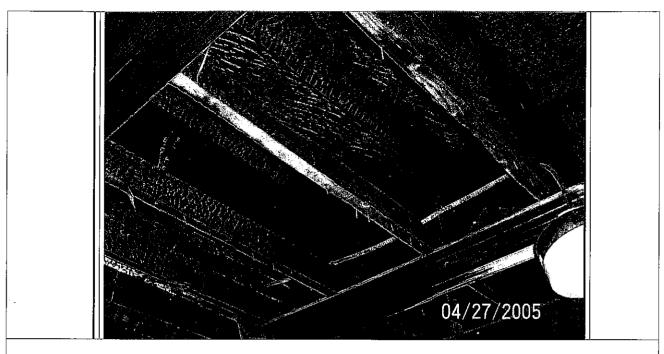


Photograph 60 - 04/27/05 - Maple Hill (Building #20): Floor boards raised at rear 1st floor



<u>Photograph 61</u> – 04/27/05 – Maple Hill (Building #20): Temporary shoring and plywood façade at front staircase





Photograph 62 - 04/27/05 - Maple Hill (Building #20): Fire damage to floor joists



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